Multisystemic Therapy: Treatment Outcome Validity and Predictors of Outcome January 2004: December 2005

July 18, 2007

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Overview

- Review purpose of this evaluation report.
- Review of findings of preliminary report.
- Discuss key findings covered in final report.
- Provide recommendations to CAMHD.

Multi-systemic Therapy

- Evidence-based service for youth with severe psychosocial and behavioral problems.
- Comprehensive assessment of the youth, family and broader social ecology.

Purpose

1. Examine validity of therapist-rated MST outcome measures by comparing these to changes in CAFAS and CALOCUS.

2. Examine client and service characteristics that might predict the extent of MST goal attainment.

3. Compare improvement in child functioning observed in MST in Hawaii to rates reported in the MST efficacy literature.

Measures

MST Measures

- MST Therapist-rated Outcomes

Standardized Measures

- Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1998)
- Child and Adolescent Level of Care Utilization System (American Academy of Child and Adolescent Psychiatry, 1999)

Participants

- Study Period: January 1, 2004 – December 13, 2005

1. Full MST Sample (N = 254)
2. Full CAFAS & CALOCUS Information Sub-Sample (N = 122)

Participants

Participant Characteristics

- Average Age = 15 years
- Gender: 2/3 Males
- Ethnicity: Multiethnic

Diagnostic Characteristics

- Primary diagnosis: disruptive behavior disorders, mood disorders, or attention disorders
- Comorbid diagnoses > 75%

MST Service Characteristics

- Average length of MST service = 135 days
- Goals at end of MST treatment = approx. 4
- Range of MST goals assigned = 1 to 9

Review of Preliminary Findings

- What Percent of Therapist-rated MST Goals Were Met at End of Treatment?
  - 70%
- Do client demographic factors predict success in MST (as rated by therapists)?
  - No
- Do clinical factors predict success in MST (as rated by therapists)?
  - Primary diagnoses not predictive
  - Comorbidity predictive of “Success”
  - “Successful” MST cases in treatment longer

What Percent of Youth Were Rated by Their Therapists As Meeting Few, Some, or All of Their Goals at the End of MST Services?

- "Successful": 48.0%
- "Partially Successful": 36.2%
- "Unsuccessful": 15.7%

Do CAMHD Cases Show Improvement Over the Course of MST Treatment As Assessed by Other Validated Measures?

CAFAS and CALOCUS Entry, Exit, and Difference Scores of MST Youth	
CAFAS entry (*SD*)	99.4 (32.4)
CAFAS exit (*SD*)	88.9 (40.8)
CAFAS difference (*SD*)	-10.6 (46.0)
CALOCUS entry (*SD*)	3.56 (1.08)
CALOCUS exit (*SD*)	3.13 (1.49)
CALOCUS difference (*SD*)	-0.43 (1.48)

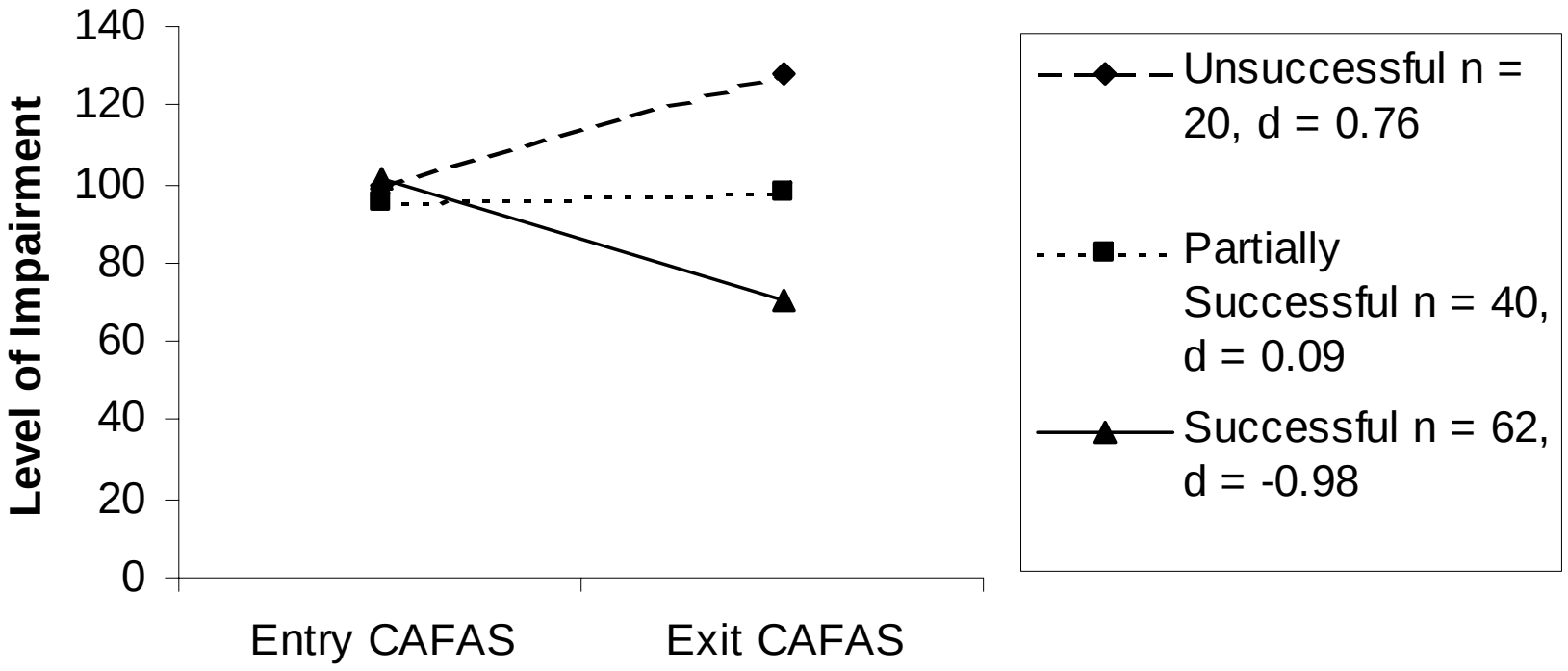
Do Ratings of "Success" Relate to Changes in CAFAS and CALOCUS Scores Over the Course of MST Services?

- MST therapist-rated outcomes were significantly correlated with outcome
  - Exit CAFAS (r = -0.52, p < .001)
  - Exit CALOCUS (r = -0.51, p < .001) scores

- Partial correlations measure relationship in change in impairment and services levels.
  - CAFAS (r = -0.53, p < .001)
  - CALOCUS (r = -0.52, p < .001)

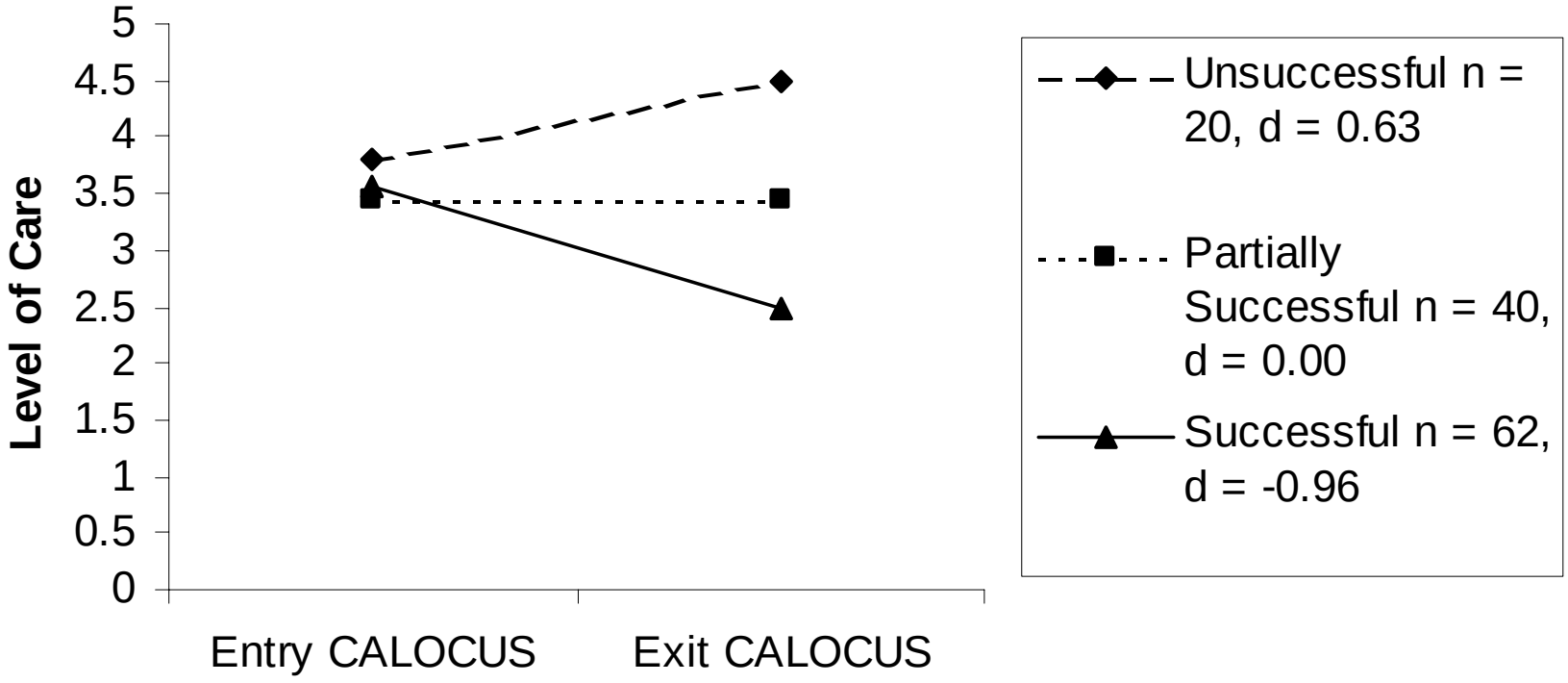
Do Ratings of "Success" Relate to Changes in CAFAS Scores Over the Course of MST Services?

Figure 1. Mean comparisons between entry and exit CAFAS and MST Outcomes



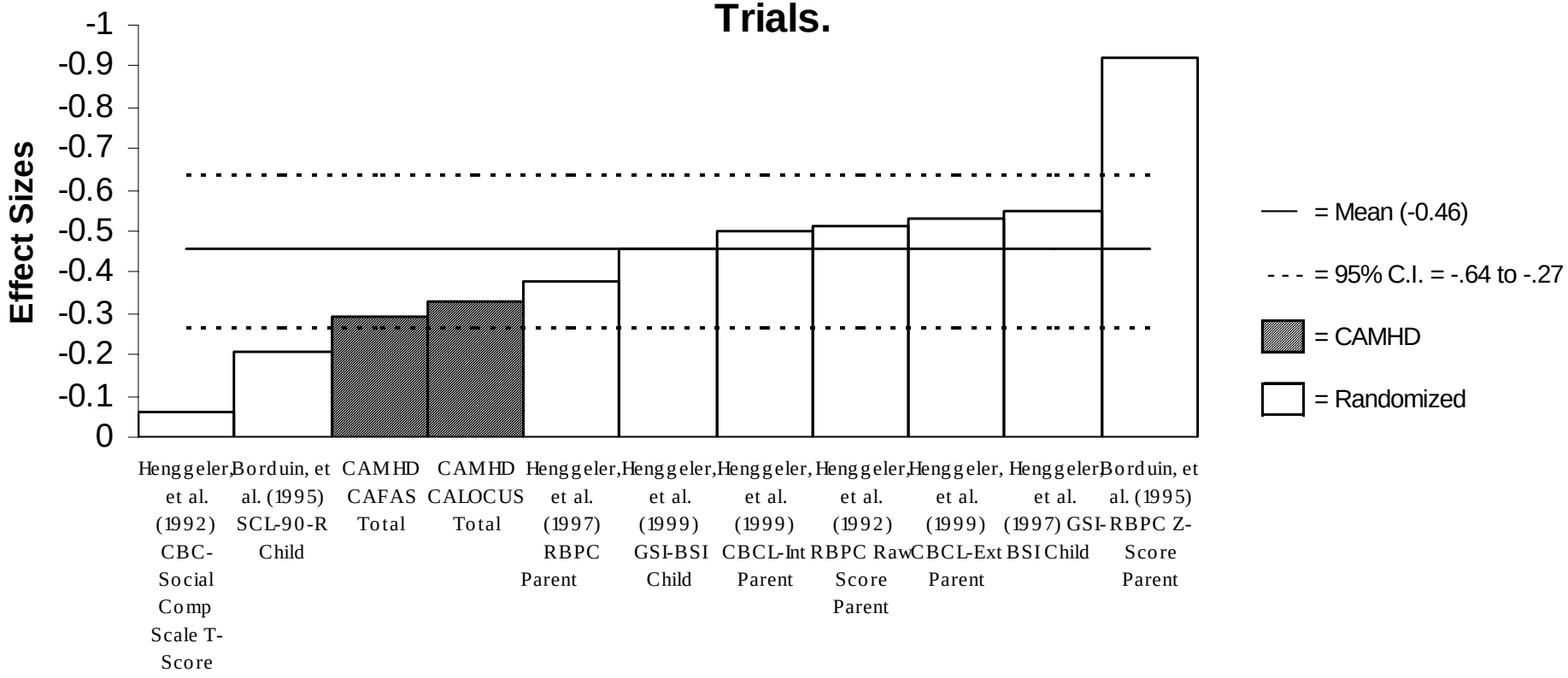
Do Ratings of "Success" Relate to Changes in CALOCUS Scores Over the Course of MST Services?

Figure 2. Mean comparisons between entry and exit CALOCUS and MST Outcomes



How Do Overall Rates of Improvement in Child Functioning Compare to Rates Seen in Randomized Controlled Trials of MST?

Figure 3. Effect Sizes for CAMHD and Randomized Controlled Trials.



Summary

- Therapist-rated MST outcomes seem to be a valid measure of treatment outcome.
- Few demographic or clinical level variables predicted therapist-rated outcomes.
- The mean size found in MST in Hawaii are within the range reported in the MST literature, but are somewhat smaller than the mean.

Recommendations

- Continue use of therapist measures of outcome.
- Reconsider the meaning of “partially successful”.
- Consider other factors that might influence likelihood of “success”.
- Continue to work toward increasing the rate of improvement for MST cases in Hawaii.
- Consider why youth with comorbid diagnoses are more likely to be rated as “successful”.
- Consider using the monthly treatment progress summary form as a way to examine whether specific treatment targets and/or treatment components relate to MST success.
- Consider MST evaluation of ultimate outcome measures assessed in other MST studies.

Thank You

Any Questions?